



SEQUENCE LISTING

<110> Kuliopoulos, Athan  
Covic, Lidija

<120> G Protein Coupled Receptor (GPCR) Agonists and  
Antagonists and Methods of Activating and Inhibiting  
GPCR Using the Same

<130> 18475-034

<140> 09/841,091  
<141> 2001-04-23

<150> 60/198,993  
<151> 2000-04-21

<160> 29

<170> PatentIn Ver. 2.1

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<223> Description of Artificial Sequence: Pepducin  
Peptide Sequence

<400> 1

Arg Cys Leu Ser Ser Ser Ala Val Ala Asn Arg Ser Lys Lys Ser Arg  
1 5 10 15

Ala Leu Phe

<210> 2  
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<223> Description of Artificial Sequence: Pepducin  
Peptide Sequence

<400> 2

Ala Val Ala Asn Arg Ser Lys Lys Ser Arg Ala Leu Phe  
1 5 10

<210> 3  
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<223> Description of Artificial Sequence: Pepducin  
Peptide Sequence

<400> 3  
Lys Lys Ser Arg Ala Leu Phe  
1 5

<210> 4  
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<212> PRT  
<213> Artificial Sequence

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<223> Description of Artificial Sequence: Pepducin  
Peptide Sequence

<400> 4  
Arg Cys Leu Ser Ser Ser Ala Val Ala Asn Arg Ser  
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<210> 5  
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Peptide Sequence

<400> 5  
Arg Cys Leu Ser Ser Ser Ala Val Ala Asn Ser Ser Ala Leu Phe  
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<210> 6  
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<212> PRT  
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<223> Description of Artificial Sequence: Pepducin  
Peptide Sequence

<400> 6  
Arg Cys Glu Ser Ser Ser Ala Glu Ala Asn Arg Ser Lys Lys Glu Arg  
1 5 10 15  
Glu Leu Phe

<210> 7  
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<223> Description of Artificial Sequence: Pepducin  
Peptide Sequence

<400> 7  
Arg Met Leu Arg Ser Ser Ala Met Asp Glu Asn Ser Glu Lys Lys Arg  
1 5 10 15  
  
Lys Arg Ala Ile Lys  
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<210> 8  
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<223> Description of Artificial Sequence: Pepducin  
Peptide Sequence

<400> 8  
Arg Met Leu Arg Ser Ser Ala Met Asp Glu Asn Ser Glu Lys Lys Arg  
1 5 10 15  
  
Lys Arg Ala Ile Phe  
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<210> 9  
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<212> PRT  
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Peptide Sequence

<400> 9  
His Thr Leu Ala Ala Ser Gly Arg Arg Tyr Gly His Ala Leu Arg  
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<210> 10  
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<212> PRT  
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<223> Description of Artificial Sequence: Pepducin  
Peptide Sequence

<400> 10  
His Thr Leu Ala Ala Ser Gly Arg Arg Tyr Gly His Ala Leu Phe  
1 5 10 15

<210> 11  
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<223> Description of Artificial Sequence: Pepducin  
Peptide Sequence

<400> 11  
Lys Val Lys Ser Ser Gly Ile Arg Val Gly Ser Ser Lys Arg Lys Lys  
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Ser Glu Lys Lys Val Thr Lys  
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<210> 12  
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<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Pepducin  
Peptide Sequence

<400> 12  
Lys Val Arg Ser Ser Gly Ile Arg Val Gly Ser Ser Lys Arg Lys Lys  
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Ser Glu Lys Lys Val Thr Phe  
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<210> 13  
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<223> Description of Artificial Sequence: Pepducin  
Peptide Sequence

<400> 13  
Arg Ile Arg Ser Asn Ser Ser Ala Ala Asn Leu Met Ala Lys Lys Arg  
1 5 10 15

Val Ile Arg

<210> 14  
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<212> PRT  
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<223> Description of Artificial Sequence: Pepducin

Peptide Sequence

<400> 14  
Arg Ile Arg Ser Asn Ser Ser Ala Ala Asn Leu Met Ala Lys Lys Arg  
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Val Ile Glu Phe  
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<210> 15  
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Peptide Sequence

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Ser Gly Ser Arg Pro Thr Gln Ala Lys Leu Leu Ala Lys Lys Arg Val  
1 5 10 15

Val Arg

<210> 16  
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<220>  
<223> Description of Artificial Sequence: Pepducin  
Peptide Sequence

<400> 16  
Ser Gly Ser Arg Pro Thr Gln Ala Lys Leu Leu Ala Lys Lys Arg Val  
1 5 10 15

Val Phe

<210> 17  
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Agonist Peptide Sequence

<400> 17  
Ser Leu Ile Gly Lys Val  
1 5

<210> 18

<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Extracellular  
Agonist Peptide Sequence

<400> 18  
Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys  
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<210> 19  
<211> 89  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Pepducin  
Peptide Sequence

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Arg Glu Leu Tyr Leu Gly Leu Arg Phe Asp Ser Asp Ser Asp Gln  
1 5 10 15

Ser Arg Val Arg Asn Gln Gly Gly Leu Pro Gly Ala Val His Gln Asn  
20 25 30

Gly Arg Cys Arg Pro Glu Thr Gly Ala Val Gly Glu Asp Ser Asp Gly  
35 40 45

C|  
Cys Tyr Val Gln Leu Pro Arg Ser Arg Pro Ala Leu Glu Leu Thr Ala  
50 55 60

Leu Thr Ala Pro Gly Pro Gly Ser Gly Ser Arg Pro Thr Gln Ala Lys  
65 70 75 80

Leu Leu Ala Lys Lys Arg Val Val Arg  
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<210> 20  
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<212> PRT  
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<223> Description of Artificial Sequence: Pepducin  
Peptide Sequence

<400> 20  
Leu Glu Leu Tyr Gln Gly Ile Lys Phe Glu Ala Ser Gln Lys Lys Ser  
1 5 10 15

Ala Lys Glu Arg Lys Pro Ser Thr Thr Ser Ser Gly Lys Tyr Glu Asp  
20 25 30

Ser Asp Gly Cys Tyr Leu Lys Thr Arg Pro Pro Arg Lys Leu Glu Leu  
35 40 45

Arg Gln Leu Ser Thr Gly Ser Ser Ser Arg Ala Asn Arg Ile Arg Ser  
50 55 60

Asn Ser Ser Ala Ala Asn Leu Met Ala Lys Lys Arg Val Ile Arg  
65 70 75

<210> 21

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Pepducin  
Peptide Sequence

<400> 21

Ile Thr Leu Trp Ala Ser Glu Ile Pro Gly Asp Ser Ser Asp Arg  
1 5 10 15

Tyr His Glu Gln Val Ser Ala Lys Arg Lys Val Val Lys  
20 25

C | <210> 22

<211> 24

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Pepducin  
Peptide Sequence

<400> 22

Lys Val Lys Ser Ser Gly Ile Arg Val Gly Ser Ser Lys Arg Lys  
1 5 10 15

Ile Arg Val Gly Ser Ser Lys Arg Arg  
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<210> 23

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Pepducin  
Peptide Sequence

<400> 23  
Val Ala Asn Arg Ser Lys Lys Ser Arg Ala Leu Phe  
1 5 10

<210> 24  
<211> 6  
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<220>  
<223> Description of Artificial Sequence: Extracellular  
PAR1 Ligand Peptide Sequence

<400> 24  
Ser Phe Leu Leu Arg Asn  
1 5

<210> 25  
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<220>  
<223> Description of Artificial Sequence: i3 peptide or  
mastoparan peptide sequence

<400> 25  
Ile Asn Leu Lys Ala Leu Ala Ala Leu Ala Lys Lys Ile Leu  
1 5 10

C1

<210> 26  
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<220>  
<223> Description of Artificial Sequence: Extracellular  
Agonist Peptide Sequence

<400> 26  
Arg Pro Lys Pro Gln Gln Phe Phe Gly Leu Met  
1 5 10

<210> 27  
<211> 6  
<212> PRT  
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<223> Description of Artificial Sequence: PAR4 Ligand  
Peptide Sequence

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Ala Tyr Pro Gly Lys Phe  
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<210> 28  
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<223> Description of Artificial Sequence: Receptor  
Peptide Sequence

<400> 28  
Pro Ala Phe Ile Ser Glu Asp Ala Ser Gly Tyr Leu Cys  
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<210> 29  
<211> 14  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: MC4pa1-14  
Pepducin Peptide Sequence

<400> 29  
Thr Gly Ala Ile Arg Gln Gly Ala Asn Met Lys Gly Ala Ile  
1 5 10